

DEPARTMENT OF DEFENSE
EDI CONVENTION

AD-A263 446



ORDER STATUS REPORT
870.003020

2

Draft

Department
of
Defense

DTIC
ELECTE
APR 26 1993
S E D

DoD Electronic Data Interchange (EDI) Convention

ASC X12 Transaction Set 870
Order Status Report
(Version 003020)

This document was prepared by the Logistics Management Institute for the Defense Logistics Agency under Task DL203-02. The task was performed under Contract MDA903-90-C-0006 with the Department of Defense. Permission to quote or reproduce any part of this document except for Government purposes must be obtained from the Department of Defense Executive Agent for Electronic Commerce/Electronic Data Interchange/Protection of Logistics Unclassified/Sensitive Systems.

Executive Agent for EC/EDI/PLUS
Defense Logistics Agency
Cameron Station
Alexandria, VA 22304-6100

DISTRIBUTION STATEMENT
Approved for public release
Distribution Unlimited

BASELINE AS OF: 21 DECEMBER 1992

93-08757

10.0 DoD EDI CONVENTION

ASC X12 TRANSACTION SET 870 ORDER STATUS REPORT (VERSION 003020)

FORMATTING THE ORDER STATUS REPORT
FOR THE DEFENSE LOGISTICS AGENCY
USING THE ASC X12 TRANSACTION SET 870.

Accession For	
NTIS CRA&I	<input checked="checked" type="checkbox"/>
DTIC TAB	<input type="checkbox"/>
Unannounced	<input type="checkbox"/>
Justification	
By	
Distribution /	
Availability Codes	
Dist	Avail and/or Special
A-1	

DTIC STATUS REPORT 1

{BLANK PAGE}

Contents

FORMATTING THE ORDER STATUS REPORT FOR THE
DEFENSE LOGISTICS AGENCY USING THE ASC X12 TRANS-
ACTION SET 870 ORDER STATUS REPORT.

10.1 Introduction

10.1 Reserved

10.2 Control Segments

10.3 Reserved

10.4 Reserved

10.5 Reserved

10.6 Reserved

10.7 DoD Conventions

10.A Reserved

10.B Reserved

10.C Example - Order Status Report To Vendors From Defense Logistics Agency Using ASC X12 870

10.D Reserved

10.E Reserved

10.F Reserved

{BLANK PAGE}

10.i INTRODUCTION

This is an Electronic Data Interchange (EDI) systems design document that describes the standard or "convention" the Defense Logistics Agency will use to provide order status data to vendors using the ASC X12 Transaction Set 870 Order Status Report (003020). It contains information for the design of interface computer programs that serve to link systems application computer programs and an EDI translator computer program.

Who Needs to Use This Document

Computer programmers can use this document to identify the data in a populated EDI transaction with data requirements of their specific application database. Conversely, programmers can identify where their applications data requirement should be carried in an EDI transaction.

Why Use a Convention

There are more ways to populate an EDI transaction than there are ways to fill out a blank form. A convention defines the rules for filling in or "populating" an EDI transaction with a specific data set. Following a convention ensures the integrity of data that is produced and processed by EDI capable computer systems.

Contents

Four sections are included in this document.

- Section 10.2, Control Segments, identifies the specific data requirements for formatting the EDI interchange control segments when sending and receiving EDI transactions.
- Section 10.7, DoD Conventions, lists the layout of the target transaction set by segment and data element. This section can be used to interpret segments and data elements of a populated transaction set.
- Appendices contain examples of populated transaction sets, trading partner data element matrix, and other items that serve as references for software developers.

{BLANK PAGE}

10.2 Control Segments

Overview

This chapter describes the Electronic Data Interchange (EDI) control segments (interchange control segments and functional group segments). The control segment information was derived from the ASC X12 Standards Version 3 Release 2 (003020).

Purpose

This chapter identifies specific data requirement for formatting the EDI control segments when transmitting and receiving EDI transactions. The format and data content of the control segments is usually managed by EDI translation software. The data requirement described herein should be used to set control segment format when installing or initializing translation software for transmission and reception of EDI transaction.

Contents

Two items are included in this chapter.

- Table 10.2-1, Interchange Control Segment Hierarchy describes the control segments in their order of occurrence in an EDI communications interchange.
- Table 10.2-2, DoD Convention ASC X12 Control Segments is a detailed description of the Department of Defense data conventions for formatting EDI standard control segments. All segments identified in Table 10.2-1 are broken down and described by their discrete data elements.

{BLANK PAGE}

TABLE 10.2-1

Control Segment Hierarchy

{BLANK PAGE}

Interchange Control Envelope
Control Segments

	Pos No.	Seg ID	Name	Req Des	Use	Loop
USE	10	ISA	Interchange Control Header	M	1	
USE	20	GS	Functional Group Header	M	1	
			•			
			• Grouped Transactions			
			•			
USE	30	GE	Functional Group Trailer	M	1	
USE	40	IEA	Interchange Control Trailer	M	1	

{BLANK PAGE}

TABLE 10.2-2

DoD Convention

ASC X12 Control Segments

{BLANK PAGE}

Segment: ISA Interchange Control Header

Usage: M

Purpose: To start and identify an interchange of one or more functional groups and interchange-related control segments. The actual values of the data element separator and the segment terminator for this interchange are set by the interchange control header. For a particular interchange, the value at the fourth character position is the data element separator, and the value of the last character position is the value of the segment terminator.

Note: The interchange control number value in this header must match the value in the same data element in the corresponding interchange control trailer.

Data Element Summary

<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>				
ISA01	I01	Authorization Information Qualifier Code to identify the type of information in the Authorization Information.	M ID 2/2				
<table><tr><th><u>Code</u></th><th><u>Definition</u></th></tr><tr><td>00</td><td>No Authorization Information Present</td></tr></table>				<u>Code</u>	<u>Definition</u>	00	No Authorization Information Present
<u>Code</u>	<u>Definition</u>						
00	No Authorization Information Present						

Authorization Information
Qualifier
[001]

ISA02	I02	Authorization Information Information used for additional identification or authorization of the sender or the data in the interchange. The type of information is set by the Authorization Information Qualifier.	M AN 10/10
-------	-----	---	------------

Authorization Information
[002]

If no authorization information is agreed to by trading partners, fill field with blanks.

ISA03	I03	Security Information Qualifier Code to identify the type of information in the Security Information.	M ID 2/2
-------	-----	---	----------

Security Information Qualifier
[003]

Code	Definition
01	Password

ISA04 104 Security Information M AN 10/10
This is used for identifying the security information about the sender or the data in the interchange. The type of information is set by the Security Information Qualifier.

Security Information
[004]

An agreed upon password. If no security information is agreed to by trading partners, fill field with blanks.

ISA05 105 Interchange Id Qualifier M ID 2/2
Qualifier to designate the system/method of code structure used to designate the sender ID element being qualified.

Interchange Id Qualifier
[005]

Code	Definition
ZZ	Mutually Defined.

ISA06 106 Interchange Sender Id M AN 15/15
Identification code published by the sender for other parties to use as the receiver ID to route data to them. The sender always codes this number in the sender ID element.

Interchange Sender Id
[006]

DoD activities use Department of Defense Activity Address Code (DoDAAC) or other code coordinated with the value-added network (VAN). Non-DoD activities use identification code qualified by ISA05 and coordinated with the VAN.

ISA07 105 Interchange Id Qualifier M ID 2/2
Code to identify the type of information in the Authorization Information.

Interchange Id Qualifier
[007]

Code Definition

ZZ Mutually Defined.

ISA08 107 Interchange Receiver Id M AN 15/15
Identification code published by the receiver of the data. When sending, it is used by the sender as their sending ID, thus other parties sending to them will use this as a receiving ID to route data to them.

Interchange Receiver Id
[008]

DoD activities use Department of Defense Activity Address Code (DoDAAC) or other code coordinated with the value-added network (VAN). Non-DoD activities use identification code qualified by ISA05 and coordinated with the VAN.

ISA09 108 Interchange Date M DT 6/6
Date of the interchange.

Interchange Date
[009]

Assigned by translation software.
YYMMDD

ISA10 109 Interchange Time M TM 4/4
Time of the interchange.

Interchange Time
[010]

Assigned by translation software.
HHMM

Interchange Control Standards Identifier [011]	ISA11 I10 Interchange Control Standards Identifier M ID 1/1 Code to identify the agency responsible for the control standard used by the message that is enclosed by the interchange header and trailer.				
Interchange Control Version Number [012] Version ID as defined or agreed upon by the trading partners.	ISA12 I11 Interchange Control Version Number M ID 5/5 This version number covers the interchange control segments. <table> <tr> <th>Code</th><th>Definition</th></tr> <tr> <td>00302</td><td>Draft Standard for Trial Use Approved for Publication by ASC X12 Procedures Review Board Through October 1990</td></tr> </table>	Code	Definition	00302	Draft Standard for Trial Use Approved for Publication by ASC X12 Procedures Review Board Through October 1990
Code	Definition				
00302	Draft Standard for Trial Use Approved for Publication by ASC X12 Procedures Review Board Through October 1990				
Interchange Control Number [013]	ISA13 I12 Interchange Control Number M NO 9/9 This number uniquely identifies the interchange data to the sender. It is assigned by the sender. Together with the sender ID it uniquely identifies the interchange data to the receiver. It is suggested that the sender, receiver, and all third parties be able to maintain an audit trail of interchanges using this number.				
Acknowledgement Requested [014] 0 = no; 1 = yes	ISA14 I13 Acknowledgement Requested M ID 1/1 Code sent by the sender to request an interchange acknowledgement.				

Test Indicator
[015]

Assigned by translation software.

ISA15 I14 Test Indicator M ID 1/1

Code to indicate whether data enclosed by this interchange envelope is test or production.

Code	Definition
------	------------

P	Production Data
T	Test Data

Subelement Separator
[016]

Use character "<".

ISA16 I15 Subelement Separator M AN 1/1

This is a field reserved for future expansion in separating data element subgroups. (In the interest of a migration to international standards, this must be different from the data element separator).

Segment: GS Functional Group Header
Usage: M

Purpose: To indicate the beginning of a functional group and to provide control information

Comment: A A functional group of related transaction sets, within the scope of X12 standards, consists of a collection of similar transaction sets enclosed by a functional group header and a functional group trailer.

Syntax Notes: 01 The data interchange control number (GS06) in this header must be identical to the same data element in the associated Functional Group Trailer (GE02).

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
GS01	479	Functional Id Code	M ID 2/2
		Code identifying a group of application related Transaction Sets.	

Code Definition

RS 870 - Order Status Information

Functional Id Code
[020]

Choose the code value appropriate to the information content of the functional group. See X12 Dictionary for source code list.

GS02	142	Application Sender's Code	M ID 2/12
		Code identifying party sending transmission. Codes agreed to by trading partners.	

Application Sender's Code
[021]

DoD activities use Department of Defense Activity Address Code (DoDAAC). Non-DoD activities use identification code assigned by DoD activity. Recommend for increased security that non-DoD code differ from that used in ISA06.

GS03	124	Application Receiver's Code	M ID 2/12
		Code identifying party receiving transmission. Codes	

Application Receiver's Code
[022]

DoD activities use Department of Defense Activity Address Code (DoDAAC). Non-DoD activities use identification code assigned by DoD activity. Recommend for increased security that non-DoD code differ from that used in ISA08.

Group Date
[023]

Assigned by translation software.

Group Time
[024]

Assigned by translation software.

Group Control Number
[025]

Assigned by translation software.

Responsible Agency Code
[026]

Indicates that an ANSI X12 standard is being transmitted.

agreed to by trading partners.

GS04 29 Group Date M DT 6/6
Date sender generated a functional group of transaction sets.

GS05 30 Group Time M TM 4/4
Time (HHMM) when the sender generated a functional group of transaction sets (local time at sender's location).

GS06 28 Group Control Number M NO 1/9
Assigned number originated and maintained by the sender.

GS07 455 Responsible Agency Code M ID 1/2
Code used in conjunction with Data Element 480 to identify the issuer of the standard.

Code Definition

X Accredited Standards Committee X12

Version/Release/Industry Id
Code
[027]

Code value agreed to by trading
partners. See X12 Dictionary for
source code list.

GS08 480 Version/Release/Industry Id M ID 1/12
Code

Code indicating the version, release, subrelease and
industry identifier of the EDI standard being used.
(See X12 Dictionary)

<u>Code</u>	<u>Definition</u>
003020	Draft Standards Approved By ASC X12 Through June 1991

Segment: GE Functional Group Trailer

Usage: M

Purpose: To indicate the end of a functional group and to provide control information

Comment: A. The use of identical data interchange control numbers in the associated functional group header and trailer is designed to maximize functional group integrity. The control number is the same as that used in the corresponding header.

Syntax Notes: 01 The data interchange control number (GE02) in this trailer must be identical to the same data element in the associated Functional Group Header (GS06).

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
GE01	97	Number of Included Sets	M NO 1/6
		Total number of transaction sets included in the functional group or interchange (transmission) group terminated by the trailer containing this data element.	
GE02	28	Group Control Number	M NO 1/9
		Assigned number originated and maintained by the sender.	

Number of Segments
[028]

Assigned by the translation
software.

Group Control Number
[029]

Assigned by the translation
software. This control number must
match the control number of the
preceding GS06 control number.

Segment: IEA Interchange Control Trailer
Usage: M
Purpose: To define the end of an interchange of one or more functional groups and interchange related control segments.
Note: The interchange control number in this trailer must match the value in the same data element in the corresponding interchange header.

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
IEA01	I16	Number of Included Functional Groups	M NO 1/5
		A count of the number of functional groups included in a transmission.	

Number of Included
Functional Groups
[040]

Assigned by translation software.

IEA02	I12	Interchange Control Number	M NO 9/9
		This number uniquely identifies the interchange data to the sender. It is assigned by the sender. Together with the sender ID it uniquely identifies the interchange data to the receiver. It is suggested that the sender, receiver, and all third parties be able to maintain an audit trail of interchanges using this number.	

Interchange Control Number
[041]

Assigned by translation software.
This number must match the number that occurs in ISA13.

10.7 DoD CONVENTIONS

Overview

This chapter is the convention for the ASC X12 Transaction Set 870 (Version 003020) as used by the Defense Logistics Agency to provide data to vendors which is used by contracting officers when making contract award determinations.

Purpose

This chapter contains all necessary information for a DoD trading partner to map and translate a Transaction Set 870. All trading partners who plan to exchange the Transaction Set 870 can use this document as a reference for the development of their EDI database/translator interface program.

Contents

One table is included in this chapter.

- Table 10.7-1, ASC X12 Transaction Set 870 Segment Hierarchy describes the 870 segments as they appear in the ASC X12 Standards Dictionary. The DoD Conventions that follow are a detailed description of the Department of Defense conventions for transmitting Transaction Set 870. All segments identified as used in the Segment Hierarchy are detailed in Table 10.7-1 by segment, position, and code value.

{BLANK PAGE}

TABLE 10.7-1

SEGMENT HIERARCHY

ASC X12 TRANSACTION SET 870
ORDER STATUS REPORT (Version 003020)

{BLANK PAGE}

870 Order Status Report

This standard provides the format and establishes the data contents of an order status report transaction set. The order status report transaction set provides the ability to report on the current status of an entire purchase order, selected line items on a purchase order, selected products/services on a purchase order, or purchase orders for a specific customer in their entirety or on a selection basis. The report format allows for the inclusion of "reasons" relative to the status of the purchase order(s). This transaction set may also be used to update the supplier's scheduled shipment or delivery date(s). This transaction set can result from either an inquiry (via the Order Status Inquiry Transaction Set [869]) or a prearranged schedule agreed to by the trading partners.

Table 1

PAGE #	POS. #	SEQ. ID	NAME	REQ. DES.	MAX USE	LOOP REPEAT
3	010	ST	Transaction Set Header	M	1	
4	020	BSR	Beginning Segment for Order Status Report	M	1	
N/U	030	NTE	Note/Special Instruction	O	100	
N/U	040	REF	Reference Numbers	O	12	
LOOP ID - N1						200
6	050	N1	Name	O	1	
N/U	060	N2	Additional Name Information	O	2	
N/U	070	N3	Address Information	O	2	
N/U	080	N4	Geographic Location	O	1	
N/U	090	REF	Reference Numbers	O	12	
N/U	100	PER	Administrative Communications Contact	O	3	
N/U	110	DTM	Date/Time Reference	O	10	

Table 2

PAGE #	POS. #	SEQ. ID	NAME	REQ. DES.	MAX USE	LOOP REPEAT
LOOP ID - HL						1000
7	010	HL	Hierarchical Level	M	1	
N/U	020	PRF	Purchase Order Reference	O	1	
LOOP ID - ISR						104
N/U	030	ISR	Item Status Report	O	1	
N/U	040	PID	Product/Item Description	O	6	
N/U	050	QTY	Quantity	O	4	
9	060	REF	Reference Numbers	O	12	
N/U	070	PER	Administrative Communications Contact	O	3	

N/U 080	DTM	Date/Time Reference	O	10
LOOP ID - N1				200
N/U 090	N1	Name	O	1
N/U 100	N2	Additional Name Information	O	2
N/U 110	N3	Address Information	O	2
N/U 120	N4	Geographic Location	O	1
N/U 130	REF	Reference Numbers	O	12
N/U 140	PER	Administrative Communications Contact	O	3
LOOP ID - PO1				1000
10 150	PO1	Purchase Order Baseline Item Data	O	1
N/U 160	SLN	Subline Item Detail	O	100
N/U 170	PO3	Additional Item Detail	O	1
N/U 180	PID	Product/Item Description	O	1000
N/U 190	MEA	Measurements	O	40
N/U 200	PKG	Marking, Packaging, Loading	O	25
LOOP ID - ISR				104
12 210	ISR	Item Status Report	O	1
N/U 220	PID	Product/Item Description	O	6
13 230	QTY	Quantity	O	4
14 240	DTM	Date/Time Reference	O	10
N/U 250	N1	Name	O	1
N/U 260	TD1	Carrier Details (Quantity and Weight)	O	1
N/U 270	TD5	Carrier Details (Routing Sequence/Transit Time)	O	1
N/U 280	TD3	Carrier Details (Equipment)	O	1
N/U 290	TD4	Carrier Details (Special Handling or Hazardous Materials or Both)	O	1
N/U 300	REF	Reference Numbers	O	12
N/U 310	ITA	Allowance, Charge or Service	O	1

Table 3

PAGE #	POS. #	SEQ. ID	NAME	REQ. DES.	MAX USE	LOOP REPEAT
15	010	CTT	Transaction Totals	M	1	
16	020	SE	Transaction Set Trailer	M	1	

NOTE:

3/010 The number of line items (CTT01) is the accumulation of the number of HL segments. If used, hash total (CTT02) is the sum of the value of quantities ordered (PO102) for each PO1 segment.

Mandatory	Segment: ST Transaction Set Header
	Level: Header
	Loop: ____
	Usage: Mandatory
	Max Use: 1
	Purpose: To indicate the start of a transaction set and to assign a control number
	Comment: The transaction set identifier (ST01) is intended for use by the translation routines of the interchange partners to select the appropriate transaction set definition (e.g., 810 selects the invoice transaction set).

Data Element Summary

	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES		
Mandatory	ST01	143	Transaction Set Identifier Code Code uniquely identifying a Transaction Set.	M	ID	3/3
			870 X12.23 Order Status Report			
Mandatory	ST02	329	Transaction Set Control Number Identifying control number assigned by the originator for a transaction set.	M	AN	4/9

Segment: BSR Beginning Segment for Order Status Report

Level: Header

Loop: _____

Mandatory **Usage: Mandatory**

Max Use: 1

Purpose: To indicate the beginning of an Order Status Report.

Comments:

1. BSR03 indicates a status report document number assigned by the sender.
2. BSR04 indicates the date of this report from the sender.
3. BSR07 indicates the time of this report from the sender.
4. BSR08 indicates a status report document number assigned by the inquirer.
5. BSR09 indicates the date this report was requested from the sender by the inquirer.
6. BSR10 indicates the time this report was requested from the sender by the inquirer.

Data Element Summary

	REP. OCC.	DATA ELEMENT	NAME	ATTRIBUTES
Mandatory	BSR01	850	Status Report Code Code indicating the reason for sending the report	M ID 1/2
			1 Response to an Order Status Inquiry (869)	
			Code Value Implementation Note: Use code "1" when responding to a request from a vendor for contract/order discrepancy data.	
			3 Unsolicited Report	
			Code Value Implementation Note: Use code "3" when sending unsolicited discrepancy data to a vendor.	
Mandatory	BSR02	847	Order/Item Code Code identifying a group of orders and items.	M ID 1/2
			CA All Orders - All Items	
			Code Value Implementation Note: Use code "CA" for a first time report of all discrepancy data or in response to a vendor's request for all discrepancy data.	
			PP Selected Orders - Selected Items	
			Code Value Implementation Note: Use code "PP" for subsequent reports providing new discrepancy data.	
Mandatory	BSR03	127	Reference Number Reference number or identification number as defined for a particular Transaction Set, or as specified by the Reference Number Qualifier.	M AN 1/30
			Implementation Note: A unique number assigned by the originator of the transaction set. This number is different from the control number carried in ST02.	

870 - AUTOMATED BEST VALUE MODEL REPORT
BSR - BEGINNING SEGMENT FOR ORDER STATUS REPORT

ANSI ASC X12 VERSION/RELEASE 003020

Mandatory	BSR04	373	Date Date (YYMMDD).	M	DT	6/6
Not Used	BSR05	848	Product/Date Code	O	ID	1/2
Not Used	BSR06	849	Location Code	O	ID	1/2
Not Used	BSR07	337	Time	O	TM	4/6
Optional	BSR08	127	Reference Number Reference number or identification number as defined for a particular Transaction Set, or as specified by the Reference Number Qualifier.	O	AN	1/30

Implementation Note:

The reference number in data element BSI01 of the transaction set to which this transaction set is responding.

Not Used	BSR09	373	Date	O	DT	6/6
Not Used	BSR10	337	Time	O	TM	4/6

Segment: N1 Name
Level: Header
Loop: N1 Repeat: 200
Usage: Optional
Max Use: 1
Purpose: To identify a party by type of organization, name and code
Syntax: 1. R0203 — At least one of N102 or N103 is required.
 2. P0304 — If either N103 or N104 is present, then the other is required.
Comment: This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.

Data Element Summary

	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTE
Mandatory	N101	98	Entity Identifier Code Code identifying an organizational entity or a physical location.	M ID 2/2
			TO Message To <i>Code Value Implementation Note:</i> Use code "TO" to indicate the message is to the party identified in data element N104.	
Not Used	N102	93	Name	C AN 1/35
Conditional	N103	66	Identification Code Qualifier Code designating the system/method of code structure used for Identification Code (67).	C ID 1/2
			33 Commercial and Government Entity (CAGE) <i>Code Value Implementation Note:</i> Use code "33" to qualify the number in data element N104 as the "CAGE" code of the party to whom the report is being sent.	
Conditional	N104	67	Identification Code Code identifying a party.	C AN 2/17
			<i>Implementation Note:</i> The actual "CAGE" code	

Mandatory

Segment: HL Hierarchical Level

Level: Detail

Loop: HL Repeat: 1000

Usage: Mandatory

Max Use: 1

Purpose: To identify dependencies among and the content of hierarchically related groups of data segments.

Comments: 1. The HL Segment is used to identify levels of detail information using a Hierarchical Structure, such as relating line item data to shipment data, and packaging data to line item data.

2. The HL segment defines a top-down/left-right ordered structure.

3. HL01 shall contain a unique alphanumeric number for each occurrence of the HL segment in the transaction set. For example HL01 could be used to indicate the number of occurrences of the HL segment, in which case the value of HL01 would be "1" for the initial HL segment, and would be incremented by one in each subsequent HL segment within the transaction.

4. HL02 identifies the Hierarchical ID Number of the HL segment to which the current HL segment is subordinate.

5. HL03 indicates the context of the series of segments following the current HL segment up to the next occurrence of an HL segment in the transaction. For example, HL03 is used to indicate that subsequent segments in the HL loop form a logical grouping of data referring to shipment, order or item level information.

6. HL04 indicates whether or not there are subordinate (or child) HL segments related to the current HL segment.

Implementation Notes:

1. When the HL loop is at the Buying Center level (HL03 = "B"), the REF segment identifying the Buying Activity (REF01 = "DX") will be the only other segment used in this iteration of the HL loop.

2. When there is no data to provide in response to an 869 Order Status Inquiry, there will be only one iteration of the HL loop at the Buying Center Level (HL03 = "B") and no other segments will be used in the loop.

Data Element Summary

Mandatory

REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES
HL01	628	Hierarchical ID Number A unique number assigned by the sender to identify a particular data segment in a hierarchical structure.	M AN 1/12

Implementation Note:

The first iteration of the HL loop will carry the number "1" in HL01. Each subsequent iteration of the HL loop will carry a progressively higher number in HL01, (e.g., 2, 3, 4, etc.).

Optional

HL02	734	Hierarchical Parent ID Number	O AN 1/12
------	-----	-------------------------------	-----------

Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to.

Implementation Note:

This data element is not used in the first iteration of the HL loop. In the second and subsequent iterations of the HL loop, HL02 will carry the hierarchical ID number contained in the parent HL01 data element.

Mandatory

HL03 735 Hierarchical Level Code M ID 1/2
Code defining the characteristic of a level in a hierarchical structure.

B Buyer's Location

Code Value Implementation Note:

Use code "B" to indicate the hierarchical level is the buying center from which the discrepancy data originated.

O Order

Code Value Implementation Note:

Use code "O" to indicate the hierarchical level is the contract/order to which the discrepancy data pertains.

Optional

HL04 736 Hierarchical Child Code O ID 1/1
Code indicating whether if there are hierarchical child data segments subordinate to the level being described.

1 Additional Subordinate HL Data Segment in This Hierarchical Structure.

Code Value Implementation Note:

Use code "1" only when HL03 is code "B".

	Segment: REF Reference Numbers				
	Level: Detail				
	Loop: HL				
Optional	Usage: Optional				
	Max Use: 12				
	Purpose: To specify identifying numbers.				
	Syntax: R0203 — At least one of REF02 or REF03 is required.				
	Data Element Summary				
	REF DES.	DATA ELEMENT	NAME	ATTRIBUTES	
Mandatory	REF01	128	Reference Number Qualifier Code qualifying the Reference Number.	M ID	2/2
			C4 Change Number Code Value Implementation Note: If necessary, use code "C4" in a second iteration of the REF segment to indicate that the number in REF02 is a modification to the contract/order identified in the previous iteration of the REF segment.		
			CT Contract Number Code Value Implementation Note: When HL03 is code "O", use code "CT" to indicate that the number in REF02 is the contract/order number.		
			DX Department/Agency Number Code Value Implementation Note: When HL03 is code "B", use code "DX" to indicate that the number in REF02 is the Activity Address number (listed in DFARS Appendix G) of the buying center.		
Conditional	REF02	127	Reference Number Reference number or identification number as defined for a particular Transaction Set, or as specified by the Reference Number Qualifier.	C AN	1/30
			Implementation Note: Used to carry the actual Activity Address number (which is listed in DFARS Appendix G), the contract/order number or the contract modification number.		
Conditional	REF03	352	Description A free-form description to clarify the related data elements and their content.	C AN	1/80
			Implementation Note: Used to carry a text abbreviation of the buying center's name. Use the following abbreviations: DGSC for the Defense General Supply Center; DCSC for the Defense Construction Supply Center; DISC for the Defense Industrial Supply Center; DESC for the Defense Electronics Supply Center; DPSC-M for Defense Personnel Support Center - Medical; DPSC-T for Defense Personnel Support - Textiles; and DPSC-S for Defense Personnel Support Center - Subsistence.		

Segment: PO1 Purchase Order Baseline Item Data

Level: Detail

Loop: PO1 Repeat: 1000

Usage: Optional

Max Use: 1

Purpose: To specify basic and most frequently used purchase order line item data

Syntax:

1. C0504 — If PO105 is present, then PO104 is required.
2. C0607 — If PO106 is present, then PO107 is required.
3. C0809 — If PO108 is present, then PO109 is required.
4. C1011 — If PO110 is present, then PO111 is required.
5. C1213 — If PO112 is present, then PO113 is required.
6. C1415 — If PO114 is present, then PO115 is required.
7. C1617 — If PO116 is present, then PO117 is required.
8. C1819 — If PO118 is present, then PO119 is required.
9. C2021 — If PO120 is present, then PO121 is required.
10. C2223 — If PO122 is present, then PO123 is required.
11. C2425 — If PO124 is present, then PO125 is required.

Comments:

1. See the Data Dictionary for a complete list of ID's.
2. PO101 is the line item identification
3. PO106 through PO125 provide for ten (10) different product/service ID's per each item. For example: Case, Color, Drawing No., UPC No., ISBN No., Model No., SKU.

Data Element Summary

REP. DES.	DATA ELEMENT	NAME	ATTRIBUTES
Optional	PO101 350	Assigned Identification Alphanumeric characters assigned for differentiation within a transaction set.	O AN 1/11
Implementation Note: <i>Used to carry the CLIN or SUBCLIN of the contract against which the discrepancy applies.</i>			
Mandatory	PO102 330	Quantity Ordered Quantity ordered.	M R 1/9
Implementation Note: <i>Used to carry the contractually required quantity for the cited CLIN or SUBCLIN.</i>			
Mandatory	PO103 355	Unit of Measurement Code Code identifying the basic unit of measurement.	M ID 2/2
Implementation Note: <i>Used to carry the CLIN or SUBCLIN unit of measure. Because the data base does not contain a unit of measure, always use to code "ZZ".</i>			
ZZ Mutually Defined			

870 - AUTOMATED BEST VALUE MODEL REPORT
PO1 - PURCHASE ORDER BASELINE ITEM DATA

ANSI ASC X12 VERSION/RELEASE 003020

Not Used	PO104	212	Unit Price	C	R	1/14
Not Used	PO105	639	Basis of Unit Price Code	O	ID	2/2
Optional	PO106	235	Product/Service ID Qualifier Code identifying the type/source of the descriptive number used in Product/Service ID (234).	O	ID	2/2
			SW Stock Number			
			<i>Code Value Implementation Note:</i> Use code "SW" to qualify the number in PO102 as the Stock Number (NSN).			
Conditional	PO107	234	Product/Service ID Identifying number for a product or service.	C	AN	1/30
			<i>Implementation Note:</i> The actual Stock Number.			
Not Used	PO108	235	Product/Service ID Qualifier	O	ID	2/2
Not Used	PO109	234	Product/Service ID	C	AN	1/30
Not Used	PO110	235	Product/Service ID Qualifier	O	ID	2/2
Not Used	PO111	234	Product/Service ID	C	AN	1/30
Not Used	PO112	235	Product/Service ID Qualifier	O	ID	2/2
Not Used	PO113	234	Product/Service ID	C	AN	1/30
Not Used	PO114	235	Product/Service ID Qualifier	O	ID	2/2
Not Used	PO115	234	Product/Service ID	C	AN	1/30
Not Used	PO116	235	Product/Service ID Qualifier	O	ID	2/2
Not Used	PO117	234	Product/Service ID	C	AN	1/30
Not Used	PO118	235	Product/Service ID Qualifier	O	ID	2/2
Not Used	PO119	234	Product/Service ID	C	AN	1/30
Not Used	PO120	235	Product/Service ID Qualifier	O	ID	2/2
Not Used	PO121	234	Product/Service ID	C	AN	1/30
Not Used	PO122	235	Product/Service ID Qualifier	O	ID	2/2
Not Used	PO123	234	Product/Service ID	C	AN	1/30
Not Used	PO124	235	Product/Service ID Qualifier	O	ID	2/2
Not Used	PO125	234	Product/Service ID	C	AN	1/30

Optional

Segment: ISR Item Status Report

Level: Detail

Loop: ISR Repeat: 104

Usage: Optional

Max Use: 1

Purpose: To specify detailed purchase order/item status.

Comment: If ISR01 specifies a date, ISR02 is required.

Data Element Summary

Mandatory

REP. DES.	DATA ELEMENT	NAME	ATTRIBUTES
ISR01	368	Shipment/Order Status Code Code indicating the status of an order or shipment or the disposition of any difference between the quantity ordered and the quantity shipped for a line item or transaction. ZZ Mutually Defined <i>Code Value Implementation Note:</i> <i>Use code "ZZ" to indicate the data provided is discrepancy data.</i>	M ID 2/2
Not Used	ISR02	373 Date	O DT 6/6
Optional	ISR03	641 Status Reason Code Code indicating the status reason.	O ID 3/3

Implementation Note:

Because the existing code list for data element 641 does not contain precise definitions for the discrepancy codes used in this transaction set, the following codes will be used:

A01 Missed Delivery**Code Value Implementation Note:**

Use code "A01" to indicate a delivery discrepancy.

A13 Other**Code Value Implementation Note:**

Use code "A13" to indicate a delivery and quantity discrepancy.

A45 Delivery Not Completed**Code Value Implementation Note:**

Use code "A45" to indicate a quantity discrepancy.

A91 Exceeds Service Limitations**Code Value Implementation Note:**

Use code "A91" to indicate a quality discrepancy.

P05 Waiting Test Results**Code Value Implementation Note:**

Use code "P05" to indicate a failed laboratory test.

ZZZ Mutually Defined**Code Value Implementation Note:**

Use code "ZZZ" to indicate a packaging discrepancy.

Optional	Segment: QTY Quantity				
	Level: Detail				
	Loop: ISR				
	Usage: Optional				
	Max Use: 4				
	Purpose: To specify quantity information.				
Implementation Note:					
Use this segment only if there is a quantity discrepancy (ISR03 = A45) or a quantity and delivery discrepancy (ISR03 = A13).					
Data Element Summary					
	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES	
Mandatory	QTY01	673	Quantity Qualifier Code specifying the type of quantity.	M	ID 2/2
		12	Ship Notice Quantity		
	Code Value Implementation Note:				
	Use code "12" when the shipment notice quantity was different than the CLIN or SUBCLIN contractually required due quantity.				
		87	Quantity Received		
	Code Value Implementation Note:				
	Use code "87" when the received quantity was different than the shipment notice quantity and/or the CLIN or SUBCLIN contractually required due quantity.				
Mandatory	QTY02	380	Quantity Numeric value of quantity.	M	R 1/15
	Implementation Notes:				
	1. When QTY01 is code "87", enter the actual received quantity.				
	2. When QTY01 is code "12", enter the shipment notice quantity.				
Not Used	QTY03	355	Unit of Measurement Code	O	ID 2/2

Segment: DTM Date/Time Reference
Level: Detail
Loop: ISR
Usage: Optional
Max Use: 10
Purpose: To specify pertinent dates and times
Syntax: R0203 — At least one of DTM02 or DTM03 is required.

Implementation Note:

Use this segment only when there is a delivery discrepancy (ISR03 = A01) or a quantity and delivery discrepancy (ISR03 = A13).

Data Element Summary

	REF. SEQ.	DATA ELEMENT	NAME	ATTRIBUTES		
Mandatory	DTM01	374	Date/Time Qualifier Code specifying type of date or time, or both date and time. 106 Required By <i>Code Value Implementation Note:</i> Use code "106" to indicate the CLIN or SUBCLIN contractually required delivery date. 111 Manifest/Ship Notice <i>Code Value Implementation Note:</i> Use code "111" to indicate the ship date in the shipment notice.	M	ID	3/3
Conditional	DTM02	373	Date Date (YYMMDD).	C	DT	6/6
			<i>Implementation Note:</i> The actual date.			
Not Used	DTM03	337	Time	C	TM	4/6
Not Used	DTM04	623	Time Code	O	ID	2/2
Not Used	DTM05	624	Century	O	NO	2/2

Segment: **CTT** Transaction Totals

Level: Summary

Loop: _____

Mandatory

Usage: Mandatory

Max Use: 1

Purpose: To transmit a hash total for a specific element in the transaction set

Syntax: 1. C0304 — If CTT03 is present, then CTT04 is required.

2. C0506 — If CTT05 is present, then CTT06 is required.

Comment: This segment is intended to provide hash totals to validate transaction completeness and correctness.

Data Element Summary

REF. DEL.	DATA ELEMENT	NAME	ATTRIBUTES		
Mandatory	CTT01	354 Number of Line Items Total number of line items in the transaction set.	M	NO	1/6
<i>Implementation Note:</i> CTT01 carries the total number of all the "HL" segments used in the transaction.					
Not Used	CTT02	347 Hash Total	O	R	1/10
Not Used	CTT03	81 Weight	O	R	1/8
Not Used	CTT04	355 Unit of Measurement Code	C	ID	2/2
Not Used	CTT05	183 Volume	O	R	1/8
Not Used	CTT06	355 Unit of Measurement Code	C	ID	2/2
Not Used	CTT07	352 Description	O	AN	1/80

Segment: SE Transaction Set Trailer
Level: Summary
Loop: _____
Mandatory
Usage: Mandatory
Max Use: 1
Purpose: To indicate the end of the transaction set and provide the count of the transmitted segments (including the beginning (ST) and ending (SE) segments).
Comment: SE is the last segment of each transaction set.

Data Element Summary

REP. DATA	DATA	NAME	ATTRIBUTES	
DEL.	ELEMENT			
Mandatory	SE01	96	Number of Included Segments Total number of segments included in a transaction set including ST and SE segments.	M NO 1/6

Implementation Note:

SE01 carries the total number of segments in the transaction set including the "ST" and "SE" segments.

Mandatory	SE02	329	Transaction Set Control Number Identifying control number assigned by the originator for a transaction set.	M AN 4/9
-----------	------	-----	--	----------

Implementation Note:

SE02 carries the same unique control number as the one in ST02.

10.C Example - X12 Transaction Set 870 Order Status Report

This appendix contains an example of Transaction Set 870 as it is used by the Defense Logistics Agency to provide to vendors data which is used by contracting officers when making contract award decisions.

{BLANK PAGE}

Example - ORDER STATUS REPORT (870) TRANSACTION SET

ASC X12 EDI SYNTAX

ST*870*0001 n/

BSR*1*CA*DLA001*921131*3M001 n/

N1*TO**33*1B712 n/

HL*1**B*1 n/

REF*DX*DLA400*DGSC n/

HL*2*1*O n/

REF*CT*DLA40090C5405 n/

PO1*0001*75*ZZ***SW*5940015873721 n/

ISR*ZZ**A01 n/

DTM*106*911101 n/

DTM*111*911111 n/

ISR*ZZ**PO5 n/

ORDER STATUS INQUIRY DATA

The transaction set is an Order Status Report (number 870) with a transaction set control number assigned by the originator of 0001.

The originator of the transaction set sent it as a response to a contractor inquiry (use code "I"); status is being provided for all orders -- all items (use code "CA"); it was assigned a unique number of DAL001; the transaction is dated November 31, 1992; it is a reply to contractor's request for information contained in an incoming inquiry (869) transaction set that bore the unique number 3M001.

This transaction set is being sent to (use code "TO") a contractor whose CAGE code (use code "33") is 1B712.

The first iteration of the hierarchical segment (use the number "1") is at the buying activity level (use code "B"); there are subordinate orders to report under this buying activity (use code "I").

This reporting buying activity (use code "DX") is numbered DLA400; it is the DGSC.

The second iteration of the hierarchical segment (use the number "2") is a contract at DGSC so it is subordinate to hierarchical iteration number 1; it is at the order (contract) level (use code "O"); there are no subordinate levels to report under this buying activity.

The contract being reported on (use code "CT") is number DLA40090C5405.

The first line item being reported on is CLIN 0001; it called for 75 units of stock number (use code "SW") 5940015873721.

This line item shows a discrepancy (use code "ZZ") that is a delivery discrepancy type (use code "A01").

The contract called for delivery of this line item (use code "106") on November 1, 1991.

The contractor's shipment notice indicated that he shipped the items (use code "111") on November 11, 1991.

This line item also shows a discrepancy (use code "ZZ") that indicates a failed laboratory test (use code "PO5").

DEPARTMENT OF DEFENSE
EDI CONVENTION

ORDER STATUS REPORT
870.003020

PO1*0002*200*ZZ***SW*5940015873722 n/l	The second line item being reported on is CLIN 0002; it called for 200 units of stock number (use code "SW") 5940015873722.
ISR*ZZ**A01 n/l	This line item shows a discrepancy (use code "ZZ") that is a delivery discrepancy type (use code "A01").
DTM*106*911101 n/l	The contract called for delivery of this line item (use code "106") on November 1, 1991.
DTM*111*911111 n/l	The contractor's shipment notice indicated that he shipped the items (use code "111") on November 11, 1991.
ISR*ZZ**ZZZ n/l	This line item also shows a discrepancy (use code "ZZ") that is a packaging discrepancy type (use code "ZZZ").
HL*3*1*O n/l	The third iteration of the "HL" loop (use the number "3") is also being reported under number 1 (which was DGSC); it is another contract (use code "O").
REF*CT*DLA40091M1234 n/l	The contract being reported on (use code "CT") is number DLA40091M1234.
REF*C4*P00001 n/l	The contract being reported on has a modification P00001 (use code "C4") issued by the contracting officer.
PO1*0001*60*ZZ***SW*5940009654384 n/l	The first line item being reported on is CLIN 0001; it called for 60 units of stock number (use code "SW") 5940009654384.
ISR*ZZ**A01 n/l	This line item shows a discrepancy (use code "ZZ") that is a delivery discrepancy type (use code "A01").
DTM*106*920604 n/l	The contract called for delivery of this line item (use code "106") on June 4, 1992.
DTM*111*000000 n/l	The contractor failed to provide a shipment notice.
ISR*ZZ**ZZZ n/l	This line item also shows a discrepancy (use code "ZZ") that is a packaging discrepancy type (use code "ZZZ").
HL*4*1*O n/l	The fourth iteration of the "HL" loop (use the number "4") is also being reported under number 1 (which was DGSC); it is another contract (use code "O").
REF*CT*DLA40090C8709 n/l	This contract being reported on (use code "CT") is number DLA40090C8709.
PO1*0002*50*ZZ***SW*5940018674344 n/l	The first line item being reported on is CLIN 0001; it called for 50 units of stock number (use code "SW") 5940018674344.
ISR*ZZ**A01 n/l	This line item shows a discrepancy (use code "ZZ") that is a delivery discrepancy type (use code "A01").
DTM*106*910203 n/l	The contract called for delivery of this line item (use code "106") on February 3, 1991.

DEPARTMENT OF DEFENSE
EDI CONVENTION

ORDER STATUS REPORT
870.003020

DTM*111*910721 n/l	The contractor's shipment notice indicated a delivery (use code "111") on July 21, 1991.
ISR*ZZ**A91 n/l	This line item also shows a discrepancy (use code "ZZ") that is a quality discrepancy type (use code "A91").
PO1*0003*50*ZZ***SW*5940018674346 n/l	The third line item being reported on is CLIN 0003; it called for 50 units of stock number (use code "SW") 5940018674346.
ISR*ZZ**A01 n/l	This line item shows a discrepancy (use code "ZZ") that is a delivery discrepancy type (use code "A01").
DTM*106*911101 n/l	The contract called for delivery of this line item (use code "106") on November 1, 1991.
DTM*111*911111 n/l	The contractor's shipment notice indicated a delivery (use code "111") on November 11, 1991.
HL*5**B*1 n/l	The fifth iteration of the "HL" loop (use the number "5") is another buying activity level (use code "B"); there are subordinate orders to report under this buying activity (use code "1").
REF*DX*DLA900*DESC n/l	The reporting buying activity (use code "DX") is numbered DLA900; it is DESC.
HL*6*5*O n/l	The sixth iteration of the "HL" loop (use the number "6") is a contract at DESC; it is subordinate to hierarchical iteration number 5; it is at the order (contract) level (use code "O"); there are no subordinate levels to report under this buying activity.
REF*CT*DLA90092A69460001 n/l	This contract being reported on (use code "CT") is a Blanket Purchase Agreement number DLA90092A6946; it contains an order number of 0001.
PO1*0002*75*ZZ***SW*5905018674348 n/l	The first line item being reported on is CLIN 0002; it called for 75 each units of stock number (use code "SW") 5905018674348.
ISR*ZZ**A45 n/l	This line item shows a discrepancy (use code "ZZ") that is a quantity discrepancy type (use code "A45").
QTY*12*50 n/l	This line item shows that the quantity shipped (use code "12") was 50 items.
PO1*0003*75*ZZ***SW*5905018674349 n/l	The second line item being reported on is CLIN 0003; it called for 75 each units of stock number (use code "SW") 5905018674349.
ISR*ZZ**A91 n/l	This line item shows a discrepancy (use code "ZZ") that is a quality discrepancy type (use code "A91").
CTT*6 n/l	In this transaction set there are six iterations of the "HL" loop.
SE*51*0001 n/l	In this transaction, which uses transaction set control number 0001, there are 51 segments, including the "ST" and "SE" segments.

NOTES: ALL NUMBERS ARE NOTIONAL AND USED FOR ILLUSTRATION PURPOSES ONLY.

The example is mapped to ASC X12 standards, version 3, release 2

An asterisk is used as the data element delimiter; the expression "n/" indicates end of the segment.

REPORT DOCUMENTATION PAGE

Form Approved
OPM No. 0704-0188

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources gathering, and maintaining the data needed, and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

1. AGENCY USE ONLY (Leave Blank)		2. REPORT DATE December 1992	3. REPORT TYPE AND DATES COVERED Draft	
4. TITLE AND SUBTITLE DoD Electronic Data Interchange (EDI) Convention ASC X12 Transaction Set 870 Order Status Report (Version 003020)			5. FUNDING NUMBERS C MDA903-90-C-0006 PE 0902198D	
6. AUTHOR(S) Stephen Luster Richard Modrowski William T. James				
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Logistics Management Institute 6400 Goldsboro Road Bethesda, MD 20817-5886			8. PERFORMING ORGANIZATION REPORT NUMBER LMI-DL203-LN11	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES) DoD Executive Agent for EC/EDI/PLUS Defense Logistics Agency DLA-ZIE, Cameron Station Alexandria, VA 22304			10. SPONSORING/MONITORING AGENCY REPORT NUMBER	
11. SUPPLEMENTARY NOTES				
12a. DISTRIBUTION/AVAILABILITY STATEMENT			12b. DISTRIBUTION CODE	
13. ABSTRACT (Maximum 200 words) This is an Electronic Data Interchange (EDI) systems design document that describes the standard or "convention" the Defense Logistics Agency will use to provide vendors with order status data using the the ASC X12 Transaction Set 870 Order Status Report (003020).				
14. SUBJECT TERMS Electronic Data Interchange; EDI; DoD EDI Convention; Electronic Commerce; ANSI X12: X12; electronic standards; electronic business standards; computer-to-computer exchange of data; electronic documents; electronic records; paperless environment; conventions			15. NUMBER OF PAGES 50	
			16. PRICE CODE	
17. SECURITY CLASSIFICATION OF REPORT Unclassified	18. SECURITY CLASSIFICATION OF THIS PAGE Unclassified	19. SECURITY CLASSIFICATION OF ABSTRACT Unclassified	20. LIMITATION OF ABSTRACT UL	